.42 Minerals

U.S. NET IMPORT RELIANCE 1/ OF METALS AND MINERALS AS A PERCENT OF APPARENT CONSUMPTION 2/ (In percent. Based on net imports of metals, minerals, ores, and concentrates.)

	Metals and Minerals 1	<u>977</u>	1978	<u>1979e</u> /	Major Foreign Sources (1975-1978)
*	Aluminum (metal) Antimony	7 41	11 43	8 43	Canada Metal: China (mainland), Mexico, Bolivia, Yugoslavia Ores: Rep. of South Africa, Bolivia, Mexico, Canada Oxide: Rep. of South Africa, United Kingdom, France, China (mainland)
	Argon	-	-	-	and the Branca
	Arsenic	W	W	W	Mexico, Sweden, France
*	Asbestos	85	85	85	Canada, Republic of South Africa Peru, Ireland, Mexico, Morocco
	Barium	38	37	40	Bauxite: Jamaica, Guinea, Surinam
*	Bauxite and alumina	91	93	93	Alumina: Australia, Jamaica, Surinam
*	Beryllium	W	W	W	Brazil, India, Rep. of South Africa, Argentina
¥	Bismuth	Ŵ	W	W	Peru, United Kingdom, Mexico, Fed. Rep. of Germany
	9	E	E	E	Colemanite, crude: Turkey
	Boron Bromine	E	Ē	Ē	Israel Netherlands, Canada
*	Cadmium	51	63	66	Metal: Canada, Australia, Mexico, BelLux.
	Cadultum				Flue dust: Mexico, Canada
	Cement	6	7	10	Canada, Mexico, Norway, Bahamas
	Cesium	100	100	100	Canada, Fed. Rep. of Germany
*		91	91	90	Chromite: Rep. of South Africa, Philippines,
	,	•			U.S.S.R., Turkey Ferrochromium: Rep. of South Africa,
	•				Southern Rhodesia, Japan
	•	_	_		United Kingdom, Canada
	Clays	E	E	E 90	Zaire, BelLux., Zambia, Finland
*	Cobalt	97	95	100	Brazil, Canada, Thailand
×		100 13	100 20	13	Canada, Chile, Zambia, Peru
*		100	100	100	Rep. of South Africa, India
	Corundum	100	100	100	Ireland, Rep. of South Africa, United
*	Diamond (industrial stones)	100			Kingdom, BelLux.
	Diamond (bort, powder, dust)	E	E	E	Ireland, Rep. of South Africa, United Kingdom, BelLux.
	Diatomite	E	E	E	Fed. Rep. of Germany, Mexico t
	Feldspar	E	E	E	Sweden, Rep. of South Africa, Canada Mexico, Rep. of South Africa, Spain, Italy
*		80	82	W	Switzerland, Fed. Rep. of Germany, Canada
	Gallium	30	38	35	Switzerland, red. Rep. of octiment,
	Garnet	-	-	- 99	Rep. of South Africa, BelLux., Israel,
	Gem stones	99	99	77	Todia United Kingdom
	Germanium	12	15	11	U.S.S.R., Fed. Rep. of Germany, BelLux.,
	6-14	61	53	56	Canada U.S.S.R., Switzerland
*	Gold Graphite (natural)	W	W	W	Marica Rep. of Korea, Madagascar, U.S.S.R.
w		31	32	33	Canada, Mexico, Jamaica, Dominican Republic
	Cypsum Hafnium	W.	W	W	Singapore, Mexico
	Helium	E	E	E	
*	Ilmenite	39	41	46	Australia, Canada Peru, United Kingdom, Canada, Japan
	Indium	NA	NΛ	NA	peru, United Kingdom, Canada, Sepan
*	Iodine	. M	W	<i>\U</i>	Japan, Chile Canada, Venezuela, Brazil, Liberia
	Iron ore	48	29	28	Japan, Europe, Canada
	Iron and steel	15	12	11 E	Canada
	Iron & steel scrap	E	E	E E	India Rep. of South Africa, Mexico
	Kyanite & related minerals	E 13	E 9	8	Canada, Peru, Mexico, Honduras, Australia
*	Lead		3	3	Canada
	Lime	2 E	E	E	Brandl Canada, France, Japan
	Lithium	E	E	E	Moral: Norway, Canada, Notherlands, Italy
	Magnesium and mag. compds.	_	-		Compounds: Ireland, Greece, India

^{* &}quot;Strategic and Critical Materials"

FIGURE 1. (Continued)

ILS. HET IMPORT RELIANCE 1/ OF METALS AND MINERALS AS A PERCENT OF APPARENT CONSUMPTION 2/
(In percent. Based on net imports of metals, minerals, ores, and concentrates.)

	Metals and Minerals	1977	1978	<u>1979e</u> /	Major Foreign Sources (1975-1978)
*	Manganese	98	97	98	Manganese Ore: Gabon, Brazil, Australia,
					Rep. of South Africa
				•	Ferromanganese: Rep. of South Africa, France,
					Japan
	Mercury	45	• 64	62	Algeria, Spain, Italy, Canada
*	Mica (natural) sheet	100	100	100	India, Brazil, Madagascar
	Mica (natural) scrap, flake		E	E .	India, Brazil, Canada
	Molybdenum	E	E	E	Canada, Chile
	Nickel	70	77	77	Canada, Norway, New Caledonia, Dominican Republic
•	Nitrogen (clemental)	4	- 5	7	Canada, Trinidad & Tobago, Mexico, U.S.S.R.
	Nitrogen (fixed)		-	<u>'</u>	Canada, filhidad & fobago, fickico, o.s.s.k.
	Oxygen Peat	31		32	Canada, Fed. Rep. of Germany
	Perlite	JI .		J2_	Canada, red. Rep. of Germany
	Phosphare rock	E	Е	E	Morocco, Netherlands Antilles
*	Platinum-group metals	91	90	89	Rep. of South Africa, U.S.S.R., United Kingdom
•	Potash	63	64	66	Canada, Israel
	Pumice & volcanic cinder	6	4	4	Greece, Italy
	Quartz crystal-electronic	14	NA	NA	Brazil
•	Radium	NA	NΛ	NA	NA .
	Rare-earth metals	W	W	W	Monazite: Australia, Malaysia, Thailand
	Rhenium	100	W	W	Fed. Rep. of Germany, Chile
	Rub1d1um	NA	NA	NA	NA
*	Rutile	W	W	100	Australia, Japan, India
	Salt	8 -	10	9	Canada, Bahamas, Mexico
	Sand and gravel -	E	E	E	Canada
	Scanding	100	100	100	NA
	Selenium	42	43	40	Canada, Japan, Yugoslavia, Mexico
*	Silicon	15	20	12	Norway, Canada, Rep. of South Africa, Yugoslavia
	Silver	31	48 -	. 45	Canada, Mexico, Peru, United Kingdom
	Sodium carbonate	E	E	E	Canada, France, Romania
	Sodium sulfate	11	7	9	Canada, Belgium, Fed. Rep. of Germany
	Stone	-	-	-	Dimension stone: Italy, Taiwan, Canada, Mexico
					Crushed stone: Canada
	Strontium	100	100	100	Mexico, Spain
	Sulfur	6	12	11	Canada, Nexico
	Talc and pyrophyllite	E	E	E	Italy, Canada, France
*	Tantalum .	97	97	96	Thailand, Canada, Malaysia, Brazil
	Tellurium	W	W 20	W 61	Canada, Peru Fed. Rep. of Germany, U.S.S.R., BelLux.
.	Thallium	9 NA	NA	NA NA	France, Netherlands, Canada
	Thorium Tin	82	79	81	Malaysia, Thailand, Indonesia, Bolivia
*		W	V.2	W	Japan, U.S.S.R., United Kingdom
	Titanium (metal) . Tungsten	52	56	59	Canada, Bolivia, Rep. of Korea
*	.Uranium	<i>52</i>	٠.	_	. Junique postitue nepi or notou
¥	Vanadium	35	36	- 25	Rep. of South Africa, Chile, U.S.S.R.
•	Variation: Vermiculite (crude)	E	E	E	Rep. of South Africa
	Yttrium	МÃ	NA	na	Monazite: Australia, Malaysia, Thailand
		. 1.5 1	•		Uranium residue: Canada
*	Zinc	57	66	62	Ore & concentrates: Canada, Honduras, Mexico
		٠.		~-	Metal: Canada, Mexico, Spain, Fed. Rep. of
					Germany
	Zirconium	K	W	W	Australia, Rep. of South Africa, India
		-			· ·

e/ Estimate.
E Net exports.
W Withheld.
NA Not available.

^{1/} Net import reliance - imports - exports + adjustments for Government and industry stock changes.

^{2/} Apparent consumption = U.S. primary + secondary production + net import reliance.

^{* &}quot;Strategic and Critical Materials"

i	Name (MFP)
	Sonoma-GErlach
Ì	Activity
ı	Minerals (4130)
ĺ	Objective Number
Į	** 4

MANAGEMENT FRAMEWORK PLAN - STEP 1 ACTIVITY OBJECTIVES

Objective: M-1 (4130)

Make all public lands and other federally owned minerals available for the exploration and development of mineral and material commodities.

Rationale:

The "Mine and Mineral Policy Act of 1970" declares that it is national policy to encourage ". . . the orderly and economic development of domestic mineral resources, reserves . . . to help assure satisfaction of industrial, security and environmental needs . . ." Accordingly, 77% of the land contained within the Sonoma-Gerlach Resource Area is public land administered by the Bureau of Land Mangement. Chance occurrence of mineral deposits favors the probability that a good portion of future mineral exploration and development will take place on these public lands. Unrestricted mining on public land would allow for full development of various mineral reserves and the exploration for yet undiscovered mineral deposits vital to strategic and economic security.

MFP I

Recommendation: M 1.1 (4130)

Make no land-use decisions that would interfere with the development of "Strategic and Critical Materials" which occur on public lands or other federally owned minerals within the Sonoma-Gerlach Resource Area.

Rationale:

The mineral and material shortages experienced during World War II led to enactment of the "Strategic and Critical Materials Stockpiling Act of 1946." This act and subsequent acts requires either government stockpiling or industrial set-asides of strategic and critical materials in time of national emergency. "Strategic and Critical Materials" are those materials that must be procured entirely or to a substantial degree from foreign sources because domestic reserves and/or production are not sufficient in quantity or quality to meet requirements in time of national emergency. Imports from these foreign sources can be disrupted or cut off at any time for various economic or political reasons. This threat combined with the ever increasing trend of federal withdrawals or restricting mineral exploration and development on public lands is of compelling national concern. Studies conducted by the Department of Interior in 1976 indicated that ". . . two-thirds of all federal lands were either . . . prohibited, severely restricted, or moderately restricted . . . " from mineral exploration and development. Even if formerly withdrawn or restricted federal lands containing strategic and critical materials are reopened in the event of a national emergency, the time lag between exploration and production can take as long as 20 years. To keep these remaining public lands open is of national concern and will provide for the continued exploration and development of strategic and critical materials necessary to meet requirements in time of national emergency.

Multiple Use Recommendation

Reject the recommendation as written--see the multiple use recommendation for Minerals 1.3.

Reasons

As written this recommendation is against Bureau policy, furthermore there is insufficient inventory work completed to identify all areas where "strategic and critical" materials are likely to occur throughout the resource area and therefore the conflicts cannot fully be analyzed at this time.

FP DISTRICT MANAGER'S DECISION:

Accept the Area Manager's recommendation and rationale.

MFP

Recommendation: M 1.2 (4130)

Make no land-use decisions that would interfere with the potential development of economically important minerals occurring on public lands or other federally owned minerals within mining districts or other areas outside of designated mining districts.

Rationale:

Mineral resources occur only in rare and unusual geologic situations. Keeping lands open and unencumbered will maximize the possibility of discovery of needed mineral resources. Areas of current and past mineral activity offer the best probability for new mineral reserves. Mining is an important social and economic influence in the Sonoma-Gerlach Resource Area. Changing world wide demand, economics, and emerging technology may enhance the economic and strategic importance of mineral commodities found in current and past mining districts. Continuing and increasing demand for minerals will serve to extend current mining activity and may foster renewed activity in old mining districts. Land-use decisions that may encumber, without compelling reason, continued and renewed mining activity should be discouraged.

MFP | Multiple Use Recommendation

Reject this recommendation--see multiple use recommendation for minerals 1.4.

Reason

As written, this recommendation is inconsistent with Bureau policy and multiple use concepts. In addition, presently there is insufficient data available to analyze conflicts of economically important minerals within and outside designated mining districts.

FP II DISTRICT MANAGER'S DECISION:

Accept the Area Manager's recommendation and rationale.

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Name (MFP)

Sonoma-Gerlach

Activity

Minerals (4130) 1.3

Overlay Reference

Step 1 M-1 Step 3

Recommendation: M 1.3 (4130)

MFP

Make no land-use decisions that would interfere with the potential development of "Strategic and Critical" materials occurring on public lands or other federally owned minerals within the following areas:

Humboldt Range - Imlay Mining District

Lakeview, Star, Black Jack, Valerie and Piedmont Mines (Tungsten, Beryllium, Mercury, Fluorite)

T. 31 N., R. 33 E., Sections 1, 12, 13, 23 thur 26 T. 31 N., R. 34 E., Sections 5 thru 8

<u>Humboldt Range - Star Mining District</u>

Bloody Canyon, Sheba, DeSoto and Pflum Mines (Antimony, Lead)

T. 31 N., R. 34 E., Sections 22, 23, 26, 27, 34, 35

Humboldt Range - Unionville Mining District

Arizona, Inskip, Millionaire, Black Warrior and Pfluger Mines (Tungsten, Antimony, Lead)

T. 30 N., R. 34 E., Sections 26 thru 28, 33 thru 35
T. 29 N., R. 34 E., Sections 2 thru 4, 9 thru 11

Humboldt Range - Rye Patch Mining District

Oreana, Rye Patch and Agnes Mines (Tungsten, Beryllium)

T. 30 N., R. 33 E., Sections 22 thru 27, 34 thru 36 T. 29 N., R. 33 E., Sections 1 thru 3, and 10 thru 15

Humboldt Range - Sacramento Mining District

Humboldt Queen Mine (Tungsten, Beryllium)

T. 28 N., R. 33 E., Sections 1 and 2 T. 29 N., R. 33 E., Sections 25, 26, 35, 36

Name (MFP) Sonoma-Gerlach Activity Minerals (4130) 1.3 Overlay Reference Step 1 M-1 Step 3

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

M 1.3 (4130) (continued)

Humboldt Range - Spring Valley Mining District

Kaolinite, Hillside, Little Linda and Cinnabar City Mines (Mercury)

T. 28 N., R. 34 E., Sections 1, 11, 12 T. 28 N., R. 35 E., Sections 6, 7

Humboldt Range - Antelope Springs Mining District

Juniper, Red Bired, Pershing, Montgomery, Hollywood, and Cervantite Mines (Mercury, Antimony)

T. 26 N., R. 34 E., Sections 1-5, 8-12, 14-17 T. 27 N., R. 34 E., Sections 30-33

West Humboldt Range - Willard Mining District

Johnson-Heizer Mine (Antimony)

T. 28 N., R. 32 E. Sections 24, 25 T. 28 N., R. 33 E., Sections 19, 29, 30 and 32

West Humboldt Range - Black Knob Mining District

Sutherland Mine (Antimony)

T. 27 N., R. 33 E., Section 15

West Humboldt Range - Wild Horse Mining District

Long Mine (Tungsten)

T. 26 N., R. 32 E., Sections 32 and 33 T. 25 N., R. 32 E., Sections 4 and 5

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION+ANALYSIS-DECISION

Name (MFP)	
Sonoma-Gerlach	
Activity	
Minerals (4130)	
Overlay Reference	
Step 1 M_1 Step 3	

M 1.3 (4130) (continued)

East Range - Rose Creek Mining District

Rose Creek Mine (Tungsten)

T. 34 N., R. 36 E., Sections 1-3, 11 and 12

T. 34 N., R. 37 E., Section 5 thru 8

East Range/Goldbank Hills - Goldbanks Mining District

Goldbanks and Quicksilver Mines (Mercury)

T. 30 N., R. 38 E., Sections 11, 14, 23

Pronto Plata Mine (Mercury)

T. 31 N., R. 38 E., Section 31

T. 30 N., R. 38 E., Sections 5 and 6

Oldtimer, Jackpot claims (Mercury)

T. 29 N., R. 38 E., Sections 15, 22, 27, 28

Stillwater Range - Table Mountain Mining District

Freckles Mine (Mercury)

T. 26 N., R. 36 E., Sections 21, 22, 27, 28

Fencemaker, Victory and Storm Mines (Antimony, Mercury)

T. 26 N., R. 36 E., Sections 25, 36

T. 26 N., R. 37 E., Sections 30 thru 32

Nickel Mine and Lovelock Mine (Nickel, Copper, Cobalt)

T. 25 N., R. 36 E., Sections 26, 27

The following areas should be coordinated with the Carson District Office:

T. 25 N., R. 36 E., Section 34, 35

T. 24 N., R. 36 E., Sections 2, 3

Sonoma-Gerlach Activity Minerals (4130). Overlay Reference Step 1 M-1

Name (MFP)

Step 3

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

M 1.3 (4130) (continued)

Sonoma Range - Black Diablo Mining District

Black Diablo and Black Diamond Mines (Manganese)

T. 33 N., R. 39 E., Sections 35, 36 T. 32 N., r. 39 E., Sections 1, 2

-Sonoma Range - Tobin and Sonoma Mining District

Horton Mercury Mine (Mercury)

T. 32 N., R. 39 E., Sections 20, 21, 28, 29

Tobin Range - Tobin and Sonoma Mining District

Big Mike and Pollard Canyon Mines (Copper, Manganese)

T. 31 N., R. 39 E., Sections 22-27, 36

T. 31 N., R. 40 E., Sections 29-32

T. 30 N., R. 40 E., Section 5, 6

Tobin Range - Mount Tobin Mining District

Eureka, Camera and Tip Top Mines (Mercury)

T. 28 N., R. 39 E., Sections 21, 27-29, 32-34

Mt. Tobin, Last Chance and North Fork Mines (Mercury)

T. 28 N., R. 39 E., Sections 1, 2, 12

T. 28 N., R. 40 E., Sections 6-8

T. 29 N., R. 39 E., Sections 35, 36

Fish Creek Mountains - Jersey Valley Mining District

Black Eagle Mine (Manganese)

T. 27 N., R. 40 E., Sections 11, 14

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Name (MFP)

Sonoma-Gerlath
Activity

Minerals 1.3 (4130)

Overlay Reference

Step 1 M-1 Step 3

M 1.3 (4130) (continued)

Buffalo Mountain

Black Hawk Mine (Manganese)

T. 33 N., R. 41 E., Sections 5-8

Battle Mountain - Battle Mountain Mining District

Gracie, Morning Star and Ridge Mines (Copper, Lead)

T. 32 N., R. 44 E., Sections 6-8, 17, 18

T. 32 N., R. 43 E., Sections 1, 2, 11, 12, 13, 14

T. 33 N., R. 43 E., Section 36

Selenite Range - Hooker Mining District

Stormy Day, Thraser and Thrabert Mines (Tungsten)

T. 30 N., R. 23-1/2 N., Sections 17, 20

T. 30 N., R. 24 E., Sections 7, 8, 18-20, 29, 30

Nightingale Mountains - Nightingale Mining District

M.G.L., Alpine, Nightingale and Jaybird Mines (Tungsten)

T. 25 N., R. 24 E., Sections 9, 10, 13-16, 20-25, 36

T. 25 N., R. 25 E., Sections 19, 30, 31

Crosby Mine (Tungsten)

T. 24 N., R. 24 E., Sections 15, 16, 20-22, 27-30

Shawave Mountains - Juniper Range Mining District

Star, Blue Wing and I Wonder Mines (Tungsten, Copper)

T. 25 N., R. 25 E., Sections 11-14, 23-26

T. 25 N., R. 26 E., Sections 19-21, 28-30

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Name (MFP)
Sonoma-Gerlach
Activity
Minerals (4130)
Overlay Reference
Step I M-1 Step 3

M 1.3 (4130) (continued)

Majuba Mountain - Antelope Mining District

Majuba Hill Mine (Copper, Tin)

T. 33 N., R. 31 E., Sections 25-28, 33-36 T. 32 N., R. 31 E., Sections 1-4, 9-12

Trinity Range - Ragged Top and Toy Mining District

Ragged Top Mine (Tungsten)

T. 25 N., R. 28 E., Sections 1, 2, 11 and 12 T. 25 N., R. 29 E., Sections 6, 7

Coon Can and St. Anthony Mines (Tungsten)

T. 25 N., R. 29 E., Sections 16, 17, 20-23, 26-35

Granite Range - Deephole Mining District

Mountain View and Mountain View Tungsten Mine (Tungsten, Copper, Lead)

T. 34 N., R. 22 E., Sections 3-5, 8-10, 15, 16

Hog Ranch Mountain - Leadville Mining District

Leadville Mine (Lead, Zinc, Copper)

T. 37 N., R. 23 E., Sections 7-9, 16-18

Fox Range - Cottonwood Mining District

Wild Horse Mine area (Copper, Nickel)

T. 29 N., R. 21 E., Sections 2, 3 T. 30 N., R. 21 E., Sections 34, 35

Note: Attach additional sheets, if needed

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

	Name (MFP)
	Sonoma-Gerlach
	Activity
	Minerals 1.3 (4130)
	Overlay Reference
Ì	Step 1 M-1 Step 3

M 1.3 (4130)(continued)

Rationale:

All of the above designated areas contain significant occurrences and reserves of potentially minable materials which fall under three classifications:

- (1) "Strategic and Critical Materials for National Stockpiles" as designated by the General Services Administration and the Federal Preparedness Agency.
- (2) "Critical Imported Material" as designated by the National Council on International Economic Policy and the National Security Council.
- (3) "Materials of Compelling National Significance" as designated by the Department of Interior.

These classifications reflect the current status of demands, domestic production, imports, and requirements in time of a national emergency. It is imperative that public land containing these "Critical Materials" remain free from any encumbrances to assure access to and exploration and development of these materials to meet requirements in time of national emergency.

Multiple Use Recommendation

1. Make no withdrawals which segregate against mineral entry on the areas identified in this recommendation as containing 'strategic and critical' minerals. Areas within Wilderness Study Areas will be further evaluated during the wilderness study process.

Humboldt Range - Imlay Mining District

Lakeview, Star, Black Jack, Valerie and Piedmont Mines (tungsten, Beryllium, Mercury, Fluorite)

- T. 31 N., R. 33 E., Secs. 1, 12, 13, 23 thru 26
- T. 31 N., R. 34 E., Secs. 5 thru 8

Humboldt Range - Star Mining District

Bloody Canyon, Sheba, DeSoto, and Pflum Mines (Antimony, Lead)

T. 31 N., R. 34 E., Secs. 22, 23, 26, 27, 34, and 35

Humboldt Range - Unionville Mining District

Arizona, Inskip, Millionaire, Black Warrior and Pfluger Mines (Tungsten, Antimony, Lead)

- T. 30 N., R. 34 E., Secs. 26 thru 28, 33 thru 35
- T. 29 N., R. 34 E., Secs. 2 thru 4, 9 thru 11

Humboldt Range - Rye Patch Mining District

Oreana, Rye Patch and Agnes Mines (Tungsten, Beryllium)

- T. 30 N., R. 33 E., Secs. 22 thru 27, 34 thru 36
- T. 29 N., R. 33 E., Secs. 1 thru 3, and 10 thru 15

Humboldt Range - Sacramento Mining District

Humboldt Queen Mine (Tungsten, Beryllium)

- T. 28 N., R. 33 E., Secs. 1 and 2
- T. 29 N., R. 33 E., Secs. 25, 26, 35, and 36

Humboldt Range - Spring Valley Mining District

Kaolinite, Hillside, Little Linda and Cinnabar City Mines (Mercury)

- T. 28 N., R. 34 E., Secs. 1, 11, 12
- T. 28 N., R. 35 E., Secs 6 and 7

<u>Humboldt Range - Antelope Springs Mining District</u>

Juniper, Red Bired, Pershing, Montgomery, Hollywood, and Cervantite Mines (Mercury, Antimony)

T. 26 N., R. 34 E., Secs. 1-5, 8-12, 14-17

T. 27 N., R. 34 E., Secs. 30 thru 33

West Humboldt Range - Willard Mining District

Johnson-Heizer Mine (Antimony)

T. 28 N., R. 32 E., Secs. 24 and 25

T. 28 N., R. 33 E., Secs. 19, 29, 30, and 32

West Humboldt Range - Black Knob Mining District

Sutherland Mines (Antimony)

T. 27 N., R. 33 E., Secs. 15

West Humboldt Range - Wild Horse Mining District

Long Mine (Tungsten)

T 26 N., R. 32 E., Secs. 32 and 33

T. 25 N., R. 32 E., Secs 4 and 5

East Range - Rose Creek Mining District

Rose Creek Mine (Tungsten)

T. 34 N., R. 36 E., Secs. 1 thru 3, 11 and 12

T. 34 N., R. 37 E., Secs 5 thru 8

East Range/Goldbank Hills - Goldbanks Mining District

Goldbanks and Quicksilver Mines (Mercury)

T. 31 N., R. 38 E., Sec. 11, 14, 23

Pronto Plata Mine (Mercury)

T. 31 N., R. 38 E., Sec. 31

T. 30 N., R. 38 E., Secs. 5 and 6

Oldtimer, Jackpot claims (Mercury)

T. 29 N., R. 38 E., Secs 15, 22, 27, 28

Stillwater Range - Table Mountain Mining District

Freckles Mine (Mercury)

T 26 N., R. 36 E., Secs. 21, 22, 27, 28

Fencemaker, Victory and Storm Mines (Antimony, Mercury)

T. 26 N., R. 36 E., Secs. 25 and 36

T. 26 N., R. 37 E., Secs. 30 thru 32

Nickel Mine and Lovelock Mine (Nickel, Copper, Cobalt)

T. 25 N., R. 36 E., Secs. 26 and 27

The following areas should be coordinated with the Carson District Office:

T. 25 N., R. 36 E., Secs. 34 and 35

T. 24 N., R. 36 E., Secs. 2 and 3

Sonoma Range - Black Diablo Mining District

Black Diablo and Black Diamond Mines (Manganese)

T. 33 N., R. 39 E., Secs. 35 and 36

T. 32 N., R. 39 E., Secs. 1 and 2

Sonoma Range - Tobin and Sonoma Mining District

Big Mike and Pollard Canyon Mines (Copper, Manganese)

T. 31 N., R. 39 E., Secs. 22 thru 27, 36

T. 31 N., R. 40 E., Secs. 29 thru 32

T. 30 N., R. 40 E., Secs. 5 and 6

Tobin Range - Mount Tobin Mining District

Eureka, Camera and Tip Top Mines (Mercury)

T. 28 N., R. 39 E., Secs. 21, 27, 28, 29, 32, 33, 34

Mt. Tobin, Last Chance and North Fork Mines (Mercury)

T. 28 N., R. 39 E., Secs. 1, 2, 12

T. 28 N., R. 40 E., Secs. 6 thru 8

T. 29 N., R. 39 E., Secs. 35 and 36

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Fish Creek Mountains - Jersey Valley Mining District

Black Eagle Mine (Manganese)

T. 27 N., R. 40 E., Secs. 11 and 14

Buffalo Mountain

Black Hawk Mine (Manganese)

T. 33 N., R. 41 E., Secs. 5 thru 8

Battle Mountain - Battle Mountain Mining District

Gracie, Morning Star and Ridge Mines (Copper, Lead)

T. 32 N., R. 44 E., Secs. 6 thru 8, 17, 18

T. 32 N., R. 43 E., Secs. 1, 2, 11, 12, 13, 14

T. 32 N., R. 43 E., Sec. 36

Selenite Range - Hooker Mining District

Stormy Day, Thraser and Thrabert Mines (Tungsten)

T. 30 N., R. 23-1/2 E., Secs. 17 and 20

T. 30 N., R. 24 E., Secs. 7, 8, 18, 19, 20, 29, 30

Nightingale Mountains - Nightingale Mining District

M.G.L., Alpine, Nightingale and Jaybird Mines (Tungsten)

T. 25 N., R. 24 E., Secs. 9, 10, 13 thru 16, 20 thru 25, 36

T. 25 N., R. 25 E., Secs. 19, 30, 31

Crosby Mine (Tungsten)

T. 24 N., R. 24 E., Secs. 15, 16, 20, 21,

Shawave Mountains - Juniper Range Mining District

Star, Blue Wing and I Wonder Mines (Tungsten, Copper)

T. 25 N., R. 25 E., Sec. 11 thru 14, 23 thru 26

T. 25 N., R. 26 E., Secs. 19 thru 21, 28 thru 30

Majuba Mountain - Antelope Mining District

Majuba Hill Mine (Copper, Tin)

T. 33 N., R. 31 E., Secs. 25 thru 28, 33 thru 36

T. 32 N., R. 31 E., Secs. 1 thru 4, 9 thru 12

Trinity Range - Ragged Top and Toy Mining District

Ragged Top Mine (Tungsten)

T. 25 N., R. 28 E., Secs. 1, 2, 11 and 12

T. 25 N., R. 29 E., Secs. 6 and 7

Coon Can and St. Anthony Mines (Tungsten)

T. 25 N., R. 29 E., Secs. 16, 17, 20, 21, 22, 23, 26 thru 35

Granite Range - Deephole Mining District

Mountain View and Mountain View Tungsten Mine (Tungsten, Copper, Lead)

T. 34 N., R. 22 E., Secs. 3 thru 5, 8 thru 10, 15 and 16

Hog Ranch Mountain - Leadville Mining District

Leadville Mine (Lead, Zinc, Copper)

T. 37 N., R. 23 E., Secs. 7 thru 9, 16 thru 18

Fox Range - Cottonwood Mining District

Wild Horse Mine area (Copper, Nickel)

T. 29 N., R. 21 E., Secs. 2 and 3

T. 30 N., R. 21 E., Secs. 34 and 35

Rationale

Adverse effects associated with mineral development can in most cases be avoided or mitigated if development is responsibly conducted.

Because of the great time lag between exploration and production (sometimes 20 years), it is of national concern not to restrict/preclude development of these minerals except in situations where damage to high resource values cannot be mitigated. No such situations were identified on the areas listed as containing 'strategic and critical materials' in this recommendation.

The 3802 regulations have provided the necessary administrative tools for mineral development in areas under wilderness review.

DISTRICT MANAGER'S DECISION:

MFP III

Accept the Area Manager's recommendation and rationale.

Sonoma-Gerlach
Activity
Minerals (4130) 1.4
Overlay Reference
Step 1 M-1 Step 3

Name (MFP)

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Recommendation: M 1.4 (4130)

MFP l

Make no land-use decisions that would interfere with the potential development of economically important minerals occurring on public lands or other federally owned minerals within the following areas:

Humboldt Range - Imlay Mining District

Imlay Canyon and Imlay Mine (Gold, Silver)

T. 32 N., R. 33 E., Secs. 24-26, 36

T. 32 N., R. 34 E., Secs. 19, 29-32

Florida Canyon Mine (Gold)

T. 31 N., R. 33 E., Sec. 2

Standard Mine (Gold, Silver)

T. 30 N., R. 33 E., Secs. 1, 2

T. 31 N., R. 33 E., Secs. 35, 36

<u>Humboldt Range - Star Mining District</u>

Tehama Mine (Copper, Silver, Gold)

T. 32 N., R. 34 E., Secs. 34, 35

T. 31 N., R. 34 E., Secs. 1, 2

Humboldt Range - Rochester Mining District

Rochester, Nevada Packard, Buck and Charley, Lincoln Hill, Plain View and Champion Mines (Silver, Gold, Dumortierite)

T. 28 N., R. 33 E., Secs. 11-14, 23, 24

T. 28 N., R. 34 E., Secs. 3-10, 15-22, 27, 34

Humboldt Range - Spring Valley Mining District

Bonanza King, Pinite Mines and numerous gold placer mines (Gold, Mercury, Silver)

T. 28 N., R. 34 E., Secs. 1, 2, 11-14, 24, 25

T. 28 N., R. 35 E., Secs. 5-8, 17-20, 29-32

T. 29 N., R. 34 E., Secs. 25, 26, 35, 36

T. 29 N., R. 35 E,. Sec. 31

Name (MFP)
Sonoma-Gerlach
Activity
Minerals (4130) 1.4
Overlay Reference
Stan 1 4 Stan 3

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

M 1.4 (4130) (continued)

Humboldt Range - Antelope Springs Mining District

Relief, Bohannon Mines and Falcon Mining Claims (Silver, Fluorite, Limestone)

T. 27 N., R. 34 E., Secs. 15, 16, 20-22, 28

West Humboldt Range - Muttlebury Mining District

Nevada Placer and Satin Spar Claims (Gypsum)

T. 26 N., R. 32 E., Secs. 2, 3 T. 27 N., R. 32 E., Secs. 21, 22, 27, 28, 33-35

West Humboldt Range - Wild Horse Mining District

Tule Prospect (Iron)

T. 26 N., R. 32 E., Secs. 34, 35 T. 25 N., R. 32 E., Secs. 2, 3,

Paiute Deposits (Iron)

T. 25 N., R. 32 E., Secs. 23-26 T. 25 N., R. 33 E., Secs. 19, 30

The following areas should be coordinated with the Carson District Office:

T. 25 N., R. 32 E., Secs. 35, 36 T. 25 N., R. 33 E., Sec. 31

Buena Vista Hills - Mineral Basin Mining District

Thomas, Nevada Iron Ore, American Ore, Beacon Hill, Iron Castle, Sections 31, Ford and Segerstrom-Heizer Mines (Iron)

T. 25 N., R. 33 E., Sec. 1

T. 25 N., R. 34 E., Secs. 1-25

T. 26 N., R. 33 E., Sec. 36

T. 26 N., R. 34 E., Secs. 19-21, 28-33

The following areas should be coordinated with the Carson District Office:

T. 25 N., R. 34 E., Secs. 31-36

T. 24 N., R. 34 E., Secs. 1-12

Note: Attach additional sheets, if needed

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Name (MFP)
Sonoma-Gerlach
Activity
Minerals (4130) 1.4
Overlay Reference

M-1 Step 3

Step 1

M 1.4 (4130) (continued)

East Range - Sierra Mining District

Auburn, Auld Lang Syne, White Bear, Dun Glen, Little Jupiter and Barber Canyon Mines (Gold, Silver, Lead, Zinc, Copper)

T. 33 E., R. 36 E., Secs. 1-18, 22-27 T. 33 N., R. 37 E., Secs. 4-9, 16-21, 28-30

East Range - Kennedy Mining District

Henrietta Mine (Lead, Silver, Zinc)

-T. 28 N., R. 37 E., Secs. 1-3, 10-12

Stillwater Range - Table Mountain Mining District

open-pit clay mines and barite mine (Clay, Barite)

T. 25 N., R. 35 E., Secs. 1, 2, 11, 12

Sonoma Range - Adelaide Mining District

Adelaide and Crown Mine (Gold, Silver)

-T. 34 N., R. 39 E., Secs. 12, 13, 24, 25, 30 T. 34 N., R. 40 E., Secs. 7-9, 16-21, 28-32

Tobin Range - Mount Tobin Mining District

northern and southern zeolite deposits of Mobil Oil Corp. (Zeolite)

T. 27 N., R. 39 E., Secs. 1, 12

T. 27 N., R. 40 E., Secs. 4-9, 17, 18

T. 28 N., R. 39 E., Sec. 36

-T. 28 N., R. 40 E., Secs. 20-22, 27-29, 31-34

Selenite Range - Hooker Mining District

U.S. Gypsum Company (Gypsum)

T. 30 N., R. 23-1/2 E,. Secs. 5, 6

T. 30 N., R. 24 E., Secs. 5, 6

T. 30-1/2 N., R. 23-1/2 E., Secs. 31, 32

T. 31 N., R. 23 E., Secs. 25, 36

T. 31 N., R. 24 E., Secs. 19, 20, 29-32

Note: Attach additional sheets, if needed

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Name (MFP)
Sonoma-Gerlach
Activity
Minerals (4130) 1.4
Overlay Reference
Step 1 M-1 Step 3

M 1.4 (4130)(continued)

Nightingale Mountains - Nightingale Mining District

Several prospects (Uranium)

T. 24 N., R. 24 E., Secs. 2-4

T. 25 N., R. 24 E., Secs. 33-35

Seven Troughs Range - Seven Troughs Mining District

Monarch, J and B Group, Mazuma Hills, Kindergarten Therian Group, Fairview Group, Womens Right Group and Portland Mines (Gold, Silver)

T. 30 N., R. 28 E., Secs. 1, 11-14, 23-26, 35, 36

T. 30 N., R. 29 E., Secs. 4-9, 16-20, 29-31

T. 31 N., R. 28 E., Secs. 24, 25, 36

T. 31 N., R. 29 E., Secs. 16-21, 28-33

Kamma Mountains - Sulfur Mining District

Sulfur Mines (Sulfur)

T. 34 N., R. 29 E., Secs. 1-3

T. 35 N., R. 29 E., Secs. 23-26, 35, 36

T. 35 N., R. 30 E., Secs. 19, 30, 31

Trinity Range - Trinity Mining District

Pearl Hill U.S. Gypsum Company (Perlite, Diatomite)

T. 28 N., R. 30 E., Secs. 3-10, 13-18, 23, 24

T. 28 N., R. 31 E., Secs. 18, 19

Trinity Range - Velvet Mining District

Antelope Basin, Horseshoe Basin, Burro Basin and Tunnel Hill Mines (Diatomite)

T. 27 N., R. 28 E., Secs. 1, 2

T. 27 N., R. 29 E., Secs. 5, 6

T. 28 N., R. 28 E., Secs. 24-26, 35, 36

T. 28 N., R. 29 E., All

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Name (MFP)		
Sonoma-Ge	rlac <u>h</u>	
Activity		
Minerals	(4130)	1.4
Overlay Refere	nce	
Step I M-1	Step 3	

M 1.4 (4130) (continued)

Trinity Range/Hot Springs Mountains

United Sierra? (Diatomite, Zeolite)

T. 23 N., R. 27 E., Secs. 12-24, 26-34

Truckee Range

United Sierra (Diatomite, Zeolite)

T. 24 N., R. 26 E., Secs. 16-22, 28-30

Black Rock Range, Calico Mountain, Northern Granite Range, Summit Lake Area (Uranium)

Public lands within the Buffalo Hills Planning Unit north of T. 34 N., are potentially valuable for uranium. These lands are designated on the Minerals MFP I Overlay for the Buffalo Hills Planning Unit.

Rationale:

All of the above described areas contain significant occurrences of materials necessary to maintain a sound economic foundation. Many of these areas are presently producing or have produced in the past substantial amounts of both metallic and nonmetallic commodities.

The area identified in the Buffalo Hills Planning Unit as being potentially valuable for uranium covers a considerable area containing several random uranium occurrences. All of this uranium mineralization occurs within Tertiary volcanic and sedimentary rocks occurring in the northern portion of the planning unit. Extensive uranium staking is occurring in the northern Black Rock Range. This interest is expected to spread throughout the northern portion of the Buffalo Hills Planning Unit.

Keeping public lands open and unencumbered will maximize the possibility of new discoveries and assure continued development of needed mineral resources. Production of these materials would benefit the local economy by providing jobs and also benefits the national economy by reducing the necessity of importing these material commodities from abroad.

Multiple Use Recommendations

Make no withdrawals which segregate against mineral entry on the areas identified in this recommendation as containing economically important minerals. Areas within Wilderness Study Areas will be further evaluated during the wilderness study process.

Humboldt Range - Imlay Mining District

Imlay Canyon and Imlay Mine (Gold, Silver)

T. 32 N., R. 33 E., Sec. 24-26, 36

T. 32 N., R. 34 E., Secs. 19, 29-32

Florida Canyon Mine (Gold)

T. 31 N., R. 33 E., Sec. 2

Standard Mine (Gold, Silver)

T. 30 N., R. 33 E., Secs. 1, 2

T. 31 N., R. 33 E., Secs. 35, 36

Humboldt Range - Star Mining District

Tehema Mine (Copper, Silver, Gold)

T. 32 N., R. 34 E., Secs. 34, 35

T. 31 N., R. 34 E., Secs. 1, 2

Humboldt Range - Rochester Mining District

Rochester, Nevada Packard, Buck and Charley, Lincoln Hill, Plain View and Champion Mines (Silver, Gold, Dumortierite)

T. 28 N., R. 33 E., Secs. 11-14, 23, 24

T. 28 N., R. 34 E., Secs. 3-10, 15-22, 27, 34

Humboldt Range - Spring Valley Mining District

Bonanza King, Pinite Mines and numerous gold place mines (Gold, Mercury, Silver)

T. 28 N., R. 34 E., Secs. 1, 2, 11-14, 24, 25

T. 28 N., R. 35 E., Secs. 5-8, 17-20, 29-32

T. 29 N., R. 34 E., Secs. 25, 26, 35, 36

T. 29 N., R. 35 E., Sec. 31

Humboldt Range - Antelope Springs Mining District

Relief, Bohannon Mines, and Falcon Mining claims (silver, fluorite, limestone)

T. 27 N., R. 34 E., Secs. 15, 16, 20-22, 28

West Humboldt Range - Muttlebury Mining District

Nevada Placer and Satin Spar Claims (Gypsum)

- T. 26 N., R. 32 E., Secs. 2, 3
- T. 27 N., R. 32 E., Secs. 21, 22, 27, 28, 33-35

West Humboldt Range - Wild Horse Mining District

Tule Prospect (Iron)

- T. 26 N., R. 32 E., Secs. 34, 35
- T. 25 N., R. 32 E., Secs. 2, 3

Paiute Deposits (Iron)

- T. 25 N., R. 32 E., Secs. 23-26
- T. 25 N., R. 33 E., Secs. 19, 30

The following areas should be coordinated with the Carson District Office:

- T. 25 N., R. 32 E., Secs. 35, 36
- T. 25 N., R. 33 E., Sec. 31

Buena Vista Hills - Mineral Basin Mining District

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Thomas, Nevada Iron Ore, American Ore, Beacon Hill, Iron Castle, Sections 31, Ford and Segerstrom-Heizer Mines (Iron)

- T. 25 N., R. 33 E., Sec. 1
- T. 25 N., R. 34 E., Secs. 1-25
- T. 26 N., R. 33 E., Sec. 36
- T. 26 N., R. 34 E., Secs. 19-21, 28-33

The following areas should be coordinated with the Carson District Office:

- T. 25 N., R. 34 E., Secs. 31-36
- T. 24 N., R. 34 E., Secs. 1-12

East Range - Sierra Mining District

Auburn, Auld Lang Syne, White Bear, Dun Glen, Little Juniper and Barber Canyon Mines (Gold, Silver, Lead, Zinc, Copper)

- T. 33 N., R. 36 E., Secs. 1-18, 22-27
- T. 33 N., R. 37 E., Secs. 4-9, 16-21, 28-30

East Range - Kennedy Mining District

Henrietta Mine (Lead, Silver, Zinc)

T. 28 N., R. 37 E., Secs. 1-3, 10-12

Stillwater Range - Table Mountain Mining District

Open-pit clay mines and barite mine (Clay, Barite)

T. 25 N., R. 35 E., Secs. 1, 2, 11, 12

Sonoma Range - Adelaide Mining District

Adelaide and Crown Mine (Gold, Silver)

T. 34 N., R. 39 E., Secs. 12, 13, 24, 25, 30

T. 34 N., R. 40 E., Secs. 7-9, 16-21, 28-32

Tobin Range - Mount Tobin Mining District

Northern and southern zeolite deposits of Mobil Oil Corp. (Zeolite)

T. 27 N., R. 39 E., Secs. 1, 12

T. 27 N., R. 40 E., Secs. 4-9, 17, 18

T. 28 N., R. 39 E., Sec. 36

T. 28 N., R. 40 E., Secs. 20-22, 27-29, 31-34

Selenite Range - Hooker Mining District

U.S. Gypsum Company (Gypsum)

T. 30 N., R. 23-1/2 E., Secs. 5, 6

T. 30 N., R. 24 E., Secs. 5, 6

T. 30-1/2 N., R. 23-1/2 E., Secs 31, 32

T. 31 N., R. 23 E., Secs. 25, 36

T. 31 N., R. 24 E., Secs. 19, 20, 29-32

Nightingale Mountains - Nightingale Mining District

Several prospects (Uranium)

T. 24 N., R. 24 E., Secs. 2-4

T. 25 N., R. 24 E., Secs. 33-35

Nightingale Mountains - Unnamed District

Several prospects (Uranium)

T. 26 N., R. 24 E., Secs. 1-4, 9-16, 21-24

T. 26 N., R. 25 E., Secs. 6, 7, 18, 19

Seven Troughs Range - Seven Troughs Mining District

Monarch, J and B Group, Mazuma Hills, Kindergarten Therian Group, Fairview Group, Womens Right Group, and Portland Mines (Gold, Silver)

- T. 30 N., R. 28 E., Secs. 1, 11-14, 23-26, 35, 36
- T. 30 N., R. 39 E., Secs. 4-9, 16-20, 29-31
- T. 31 N., R. 28 E., Secs. 24, 25, 36
- T. 31 N., R. 29 E., Secs. 16-21, 28-33

Kamma Mountains - Sulfur Mining District

Sulfur Mines (Sulfur)

- T. 34 N., R. 29 E., Secs. 1-3
- T. 35 N., R. 29 E., Secs. 23-26, 35, 36
- T. 35 N., R. 30 E., Secs. 19, 30, 31

Trinity Range - Trinity Mining District

Pearl Hill U.S. Gypsum Company (Perlite, Diatomite)

- T. 28 N., R. 30 E., Secs. 3-10, 13-18, 23, 24
- T. 28 N., R. 31 E., Secs. 18, 19

Trinity Range - Velvet Mining District

Antelope Basin, Horseshoe Basin, Burro Basin and Tunnel Hill Mines (Diatomite)

- T. 27 N., R. 28 E., Secs. 1, 2
- T. 27 N., R. 29 E., Secs. 5, 6
- T. 28 N., R. 28 E., Secs 24-26, 35, 36
- T. 28 N., R. 29 E., All

Trinity Range/Hot Springs Mountains

United Sierra? (Diatomite, Zeolite)

T. 23 N., R. 27 E., Secs. 12-24, 26-34

Truckee Range

United Sierra (Diatomite, Zeolite)

T. 24 N., R. 26 E., Secs. 16-22, 28-30

Rationale

Adverse effects associated with mineral development can, in most cases, be avoided or mitigated if development is responsibly conducted.

The development of economically important minerals is a significant factor in the resource area's employment figures, and over 1,000 people are dependent upon this sector. Some communities are entirely dependent upon the continued development of economically important minerals—i.e., Empire.

The 3802 regulations have provided the administrative tools for mineral development in areas under wilderness review.

No conflicts were identified in this analysis that would require a mineral withdrawal to mitigate identified resource problems in the specific areas covered by this recommendation.

MFP | | DISTRICT MANAGER'S DECISION:

Accept the Area Manager's recommendation and rationale.

MANAGEMENT FRAMEWORK PLAN - STEP 1 ACTIVITY OBJECTIVES

Name (MFP)	
Sonoma-Gerlach	
Activity	
Minerals (4130)	
Objective Number	
M-2	

Objective: M-2 (4130)

Eliminate hazards connected with past mining activity.

Rationale:

Many safety hazards, such as open shafts, unstable adits and tunnels and old milling works, exist within the resource area and are the result of past mining activity. These hazards represent a danger to both humans, livestock and and wildlife, and therefore, should be eliminated. Known hazards are identified in URA Step II (Physical Profile) section .38C2 and Overlay - Other Limiting Factors.

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Name (MFP)				
Sonoma	Sonoma-Gerlach				
Activity	· · · · · · · · · · · · · · · · · · ·				
Minera	1s (4130)				
Overlay Ref	Overlay Reference				
Step 1	Step 3				

Recommendation: M 2.1 (4130)

MEP

The following steps should be employed in eliminating hazards related to mining activities:

- a. Identification of hazardous adits, shafts, tunnels, structures and wastes.
- b. Investigate ownership status of the hazardous site to determine responsibility for hazard reduction.
- c. If mine workings are both accessible and safe, map the workings for geologic and hazards information.
- d. Determine the best method of hazard reduction (i.e. closure of adit or tunnel entries, filling or fencing of shafts, coutouring of waste piles, signing, etc.).
- e. Public in local newspaper for three consecutive weeks, location(s) and type(s) of hazardous condition(s) to be eliminated.
- f. Eliminate hazards after legal notification.

Rationale:

In and around mining districts old workings are often left open. Sometimes pits, shafts and open slopes remain as hazards long after the mining operations have ceased. An orderly procedure to eliminate hazards related to past mining activities will serve to determine responsibility for hazard reduction, protect the government against claims of "unjust action" and provide for information that can be used in further geologic investigation.

It may be assumed that after October 22, 1979, because of Section 314 (Recordation of Mining Claims and Abandonment) of Public Law 94-579 (Federal Land Policy and Management Act) that administrative authority and, therefore, liability for abandoned claims will be revested to the federal government.

Support:

Nevada State Office Cadastral, Bureau legal support, and earth moving equipment to accomplish some of the tasks required to eliminate hazardous conditions.

Multiple Use Recommendation

MFP | The following steps should be employed in eliminating hazards related to mining activities:

- a. Identification of hazardous adits, shafts, tunnels, structures, and wastes.
- b. Investigate ownership status of the hazardous site to determine responsibility for hazard reduction.
- c. If mine workings are both accessible and safe, map the workings for geologic and hazards information.
- d. Determine the best method of hazard reduction (i.e. closure of adit or tunnel entries filling or fencing of shafts, contouring of waste piles, signing, etc.).
- e. Publish in local newspaper for three consecutive weeks, location(s) and type(s) of hazardous condition(s) to be eliminated.
- f. Eliminate hazards after legal notification.

Rationale

The recommendation lays out an orderly procedure to eliminate hazards related to past mining activities on public lands.

The Bureau has administrative authority and therefore, responsibility for hazard reduction on abandoned mining claims.

Support

- 1. Cadastral
- 2. ATROW
- Archeological
- Legal solicitor's assistance.

FP | DISTRICT MANAGER'S DECISION:

Reject the recommendation. Make this procedure one of the District's standard operating procedures.

Rationale

The Bureau's responsibility for hazard reduction is clearly define. A MFP decision is not needed to take action to reduce hazards on the public lands.

MANAGEMENT FRAMEWORK PLAN - STEP 1 ACTIVITY OBJECTIVES

Name (MFP)	
Sonoma-Gerlach Activity	
Minerals (4130)	
Objective Number	
M-3	

<u>Objective</u>: M-3 (4130)

Provide sand, gravel and other mineral materials as needed for construction purposes to federal, state, local government, private industries, and individuals.

Rationale:

Portions of Humboldt, Pershing, Churchill and Washoe Counties are experiencing rapid population and economic growth. This growth has created a demand for mineral materials used in the construction of roads and buildings. Public land in many cases is the only source of needed mineral materials.

Recommendation: M 3.1 (4130)

Issue free use permits to federal, state, and local governments for mineral materials as needed for construction in a timely and consistent manner. If the demand for mineral materials by private industry increases, establish material sale sites as needed. As the need arises establish and develop community material sites near communities to serve the needs of private individuals. Evaluate abandoned material sites to determine the total effort in dollars and resources needed to begin a rehabilitation program.

Rationale:

An inventory of existing and potential material sites will allow for better management of public lands and also provide a framework to better serve the needs of material users. Public lands in many cases are the only source of needed mineral materials. Rising fuel costs will likely result in a demand from governmental agency for closer spacing of material sites to reduce expensive hauling costs. High fuel costs coupled with rapid population and economic growth creates a demand for more material sites. Where city and county zoning ordinances allow materials sites should be located as close as practical to the area of demand in order to meet national energy conservation measures.

Many material sites selected by the Nevada Department of Transportation for future use but, not yet activated, need to be re-evaluated and possibly made available to other users.

Many abandoned material sites in the resource area have not been rehabilitated and now are the sites of garbage dumps. These sites need to be cleaned up, pit walls resloped and top soil spread over the surface to help facilitate natural revegetative processes.

Support:

District and area personnel will be required to conduct predisturbance clearances and environmental analysis. Heavy equipment will be required to periodically maintain community materials sites and access routes.

Multiple Use Recommendation

MFP | Reject the recommendation 3.1.

Reasons

Land use decision in this planning process is not required to restate current Bureau policy, on issuance of free use permits to governmental agencies or providing material sites for community use, or to evaluate work required to begin a rehabilitation programs.

MFP || DISTRICT MANAGER'S DECISION:

Develop community material sites near the communities of Winnemucca, Lovelock, and Gerlach.

Rationale

Community material sites make administration much easier. The demand for sand and gravel has risen sharply near Winnemucca and Lovelock. Community pits presently exist near Denio, Orovada, and McDermitt.

Name (MFP)	
Sonoma-Gerlach	
Activity	
Minerals (4130)	
Objective Number	
M-4	

MANAGEMENT FRAMEWORK PLAN - STEP 1 ACTIVITY OBJECTIVES

Objective: M-4 (4130)

Paleontological resources will be conserved for their scientific value.

Rationale:

Federal management policy of paleontological resources was set forth as follows by Public Law 94-579 (Federal Land Policy and Management Act of October 21, 1976), Section 2 (a) (8) ". . . that the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environemental, air and atmospheric, water resources, and archeological values; that, where appropriate will preserve and protect certain lands in their natural condition."

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MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Name (MFP)	
Sonoma-Ge	rlach
Activity	
Minerals	(4130)4-1
Overlay Referes	nce
Step 1 4 2	Step 3

Recommendation: M 4.1 (4130)

MFP I

No activity that disturbs bedrock material or unconsolidated materials in areas with known paleontological resources will be permitted until a paleontological clearance has been conducted.

Rationale:

Predisturbance paleontologial resource clearance procedures will offer paleontological resources in areas of known occurrence a satisfactory degree of protection.

Support:

Paleontologial resource management training should be implemented Bureau-wide to standardize management and clearance procedures and provide needed training for the district geologist. In the event of a major discovery funds need be available to contract for professional paleontological surveys and/or collection.

Multiple Use Recommendation

MFP | No activity that disturbs bedrock material or unconsolidated materials in areas with known paleontological resources will be permitted until a paleontological clearance has been conducted.

Rationale

The Bureau is obligated to protect the "scientific values" (paleontological-vertebrate fossils found on public land).

FP III DISTRICT MANAGER'S DECISION:

Reject the recommendation.

Rationale

This is standard operating procedure for the District.

?@ Q#

_Sonoma-Gerlach	
Activity	
Minerals	
Objective Number	
_	

Name (MFP)

MANAGEMENT FRAMEWORK PLAN - STEP 1 ACTIVITY OBJECTIVES

Objective: M-5

Make energy resources available on all public lands and other lands containing federally owned minerals.

Rationale:

Energy self-sufficiency is a natioanl priority and continues to be a top priority of Bureau's program.

Geothermal

The use of clean efficient geothermal energy for both electrical and non-electrical applications will lessen the demand for fossil fuels on local, state, national and international levels.

Sonoma-Gerlach Resource Area holds great promise for the development of geothermal facilities, both at the private and commercial levels.

Approximately 65% of the Sonoma-Gerlach Resource Area has been classified as Prospectively Valuable for Geothermal Resources. Fourteen Known Geothermal Resource Areas (KGRA) exist in the resource area. Six of these KGRAs are estimated to have a'. total electrical generating capacity of 1,188 megawatts for at least 30 years. Although statistics for quantifying the non-electrical applications of geothermal energy are very limited at this time, it is belineved that the major hot spring systems of the resource area hold great potential for food processing, space heating, greenhouses, crop drying, water desalting, gasohol (alcohol) production, etc., using geothermal energy. The vegetable dehydrating plant at Brady's Hot Springs dried 25 million pounds of raw onions in 1979, and an alcohol brewing plant is planned at the Hot Springs Ranch (Tipton's Well). Heat derived from geothermal fluids will be utilized in the brewing process, which is expected to produce 200 gallons of alcohol per day.

Sierra Pacific Power Company is conducting a study to determine whether it would be feasible to put a 5 megawatt power plant at Desert Peak or Dixie Valley.

	Name (MFP)
	Sonoma-Gerlach Activity
l	Minerals
ı	Objective Number
ł	V - E

MANAGEMENT FRAMEWORK PLAN - STEP 1 ACTIVITY OBJECTIVES

M-5 (continued)

The impacts of geothermal development include the initial exploration activities followed by construction of plants, roadways, railroad spurs, wellheads, pipelines, and power lines. The major potential electricity generating qeothermal systems in the Sonoma-Gerlach Resource Area are located near major power lines, shipping routes, and communities. Local economies will be greatly stimulated by proving the necessary services, supplies and materials during the various phases of geothermal development. Peak demands will occur during plant construction and then will taper off and stabilize as operation and maintenance personnel replace construction workers.

The Brady Plant employs a maximum of 80 people at full plant capacity, 7 days a week, 24 hours a day. So far, however, the plant is only a seasonal operation.

Successful and prosperous geothermal projects in the Sonoma-Gerlach Resource Area would encourage more exploration here. Increased exploration would eventually uncover more geothermal resources, and also stimulate initiation of new exploration and heat extraction techiques.

Oil and Gas

Less than five percent of the Sonoma-Gerlach Resource Area has been classified by the U.S. Geological Survey as Prospectively Valuable for Oil and Gas. However, leasing interest in the entire District, especially within the Sonoma portion of the resource area has been increasing. The Munger Oilogram (Feb. 1, 1980) has reported high gravity oil shows in the "Ellison" well in Pumpernickel Valley, indicating some potential for the discovery of oil and gas.

The Energy Policy and Conservation Act of 1975 has alerted the nation's attention to the need for developing all forms of energy, and energy materials.

The impacts of oil and gas development would be very similar to geothermal development. A period of exploration followed by construction of wells, wellheads, pipelines, access roads, railroad spurs, storage tanks, power lines, etc.

MANAGEMENT	FRAMEWORK	PLAN
RECOMMENDATION	-ANALYSIS-	DECISION

Name (MFP)
Sonoma-Gerlach
Activity
Minerals 5.1
Overlay Reference
Step 1 2 Step 3

Recommendation: M 5.1

MFP

Make no land use decisions that would interfere with or prevent geothermal leasing, exploration, and/or development on public lands, or any other lands containing federally owned minerals, classified by the U.S. Geological Survey as Prospectively Valuable for Geothermal Resources, or land classified as Known Geothermal Resource Areas (KGRA).

Rationale:

The classification of lands as Prospectively Valuable for Geothermal Resources indicates that a greater potential for the occurrence of geothermal resources exists on these lands as compared with non-classified lands.

Evidence suggests that those lands further classified as Known Geothermal Resource Areas hold the greatest potential of any lands for the occurrence of geothermal resources, and may be economically feasible for the development of geothermal production facilities.

Geothermal systems in or near the following KGRAs are considered capable of producing electricity: Gerlach, San Emidio Desert, Brady Hazen, Rye Patch, Leach Hot Springs, Kyle Hot Springs and Dixie Valley. In addition the following hot spring areas, which are not included in KGRAs, are also considered capable of producing electricity: Buffalo Valley, Hot Springs Ranch, and Jersey Valley thot Springs. All of these systems are also considered attractive for non-electrical applications of geothermal heat utilization.

Exploration activities and scientific studies by private companies, government agencies, and the academic community are essential to the continued growth of knowledge concerning geothermal resources. It is important that the Bureau have as much knowledge as possible regarding the extent and development potential of geothermal resources when making long-term land use decisions.

MANAGEMENT	FRAMEWORK PLAN
RECOMMENDATION	I-ANALYSIS-DECISION

Name (.)	i:P)	
Sonon	na <u>-</u> Ger	lach
Activity		-
Miner	als 5	5.1
Overlay	Referen	Ce
Step 1	2	Step 3

M 5.1 (continued)

Two Oil and Gas/Geothermal Leasing EARs have been completed assessing the impacts of gas and oil, and geothermal exploration, leasing, and development in the Sonoma-Gerlach Resource Area. Since completion of those EARs several geothermnal leases have been issued and exploration activities are on the increase. At the time of this writing 182 lease applications are pending in the resource area.

Buffalo Hills Planning Unit

A large portion of the Buffalo Hills Unit was temporarily excluded from leasing as a result of conclusions and recommendations made in the Buffalo Hills Oil and Gas/Geothermal Leasing EAR No. 27-020-4-99. These withdrawn lands have been inventoried since the completion of that EAR and have been found to contain significantly more geothermal resources than had been previously known.

A total of 61% of the KGRA acreages in the Buffalo Hills Unit have been temporarily excluded from leasing. Other lands excluded from leasing include most of the Black Rock Desert between Gerlach and Trego, and north to Soldier Meadows, most of the San Emidio Desert, and portions of the Smoke Creek Desert. These lands, with the exception of the northwestern portion of the Smoke Creek Desert, have been classified as Prospectively Valuable for Geothermal Resources by the U.S. Geological Survey.

Lease applications are pending in many of these areas, some as far back as 1974. Making these lands available for geothermal leasing would encourage exploration and development of geothermal resources.

Four IBLA decisions (24 IBLA 1133, March 1, 1976; 24 IBLA 262, March 29, 1976; 24 IBLA 383, April 29, 1976; 27 IBLA 54, September 23, 1976) have questioned certain inconsistencies and ambiguities of the EAR and the Bureau's decision making progress in regards to the EARs recommendations.

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

	Name (MFP)
	Sonoma-Gerlach
	Activity
ļ	Minerals 5.1.
	Overlay Reference
	Step 1 2 Step 3

M 5.1 (continued)

Blue Wing and Sonoma Planning Units

Several areas in the Blue Wing and Sonoma Planning units have been withdrawn from leasing pending further studies as a result of recommendations in the Winnemucca District Regional Oil and Gas/Geothermal Leasing EAR No. 27-020-4-103.

In some cases specific locations are indicated but in the case of historic trails, the EAR recommends "that those trail segments actually involved in a lease application be examined by a qualified archeologist for archeological and historical values prior to issuance of a lease."

Most of these areas lie within the lands classified by the U.S. Geological Survey as Prospectively Valuable for Geothermal Resources and lands classified as Known Geothermal Resource Areas (KGRA) and should be leased with as few delays as possible.

However, this is not always the case. In some cases these examinations take several months or years to complete. In the meantime leases are not issued, exploration is minimized and no development can occur.

Support:

The following support items are needed to accomplish the objectives and recommendations:

- Review, revise and update the Buffalo Hills Planning Unit Oil and Gas/Geothermal Leasing EAR Nol 27-020-4-99 and the Winnmeucca District Regional Oil and Gas Leasing EAR No. 27-020-40-103.
- 2. Complete pre-lease archeological and historical clearances.
- 3. Complete wilderness inventories to clear intensive study areas.
- 4. Fire suppression needs.
- 5. Cadastral survey needs.

M 5.1 (continued)



Multiple Use Recommendation

Reject the recommendation.

Reasons

Virtually the entire resource area has been classified as "Prospectively Valuable For Geothermal Resources, or land classified as Known Geothermal Resource Areas (KGRAs)."

Minerals Recommendations 5.2 and 5.3 address specific geothermal recommendations and multiple use recommendations which have been written on these specific recommendations.

FP | DISTRICT MANAGER'S DECISION:

Accept the Area Manager's recommendation and rationale.

Sono	ma-Ge	rlach
Activity		
Mine	rals	5.2
Mine: Overlay	Refere	nce
Step 1	2	Step 3

Name (MFP)

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Recommendation: M 5.2

MFP

Offer the following KGRAs for competitive leasing as soon as possible.

- 1. Soldier Meadows
- Double Hot Springs
- 3. Trego
- 4. Gerlach
- 5. Gerlach Northeast
- Fly Ranch
- 7. Fly Ranch Northeast
- 8. San Emidio Desert
- Brady Hazen

Rationale:

Evidence suggests that lands classified as Known Geothermal Resource Areas (KGRA) hold the greatest potential of any land for the occurrence of geothermal resources, and may be economically feasible for the development of geothermal production facilities. Offering KGRAs for competitive leasing encourages exploration for and development of geothermal resources, thus helping to bring the nation closer to the goal of energy self-sufficiency.

A total of 61% of the KGRA acreages in the Buffalo Hills Planning Unit have been temporarily excluded from leasing (Buffalo Hills Planning Unit Oil and Gas/Geothermal Leasing EAR No. 27-020-4-99). These excluded lands include all of the Soldier Meadows, Double Hot Springs and Trego KGRAs and most of the Gerlach Northeast KGRA. In addition, large parts of the Gerlach and San Emidio Desert KGRA, and a small portion of the Fly Ranch KGRA have been excluded from leasing. Portions of the Fly Ranch, Gerlach and Brady Hazen KGRAs have previously been offered for competitive leasing. San Emidio and Gerlach KGRAs are tentatively scheduled to be offered for bid in March 1980.

MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Name (MFP)
ASonoma-Gerlach
Activity
Minerals 5.2
Overlay Reference
Step 1 2 Step 3

With the exceptions of Gerlach Northeast and Fly Ranch Northeast all of the above listed KGRAs have geothermal systems which may be considered economically feasible for development of geothermal production facilities. San Emidio Desert and Brady Hazen GKRAs are estimated to have the potential to generate 28 and 907 megawatts of electricity fo 30 years, respectively.

Support:

The following support items are needed to accomplish the objectives and recommendations:

- Review, revise and update the Buffalo Hills planning Unit Oil and Gas/Geothermal EAR No. 27-020-4-99.
- Complete wilderness studies to clear intensive study areas.
- 3. Complete pre-lease archeological and historical clearances.
- 4. Fire suppression needs.
- 5. Cadastral survey needs.

Multiple Use Recommendations

MFP | Offer the following KGRAs for competitive leasing as soon as possible; San Emidio

Parts of Trego - south of the Western Pacific Railroad Tracks Fly Ranch

Gerlach - portions not on the Black Rock Playa

Gerlach Northeast - portions not on the Black Rock Playa Fly Ranch Northeast - portions not on the Black Rock Playa Brady Hazen

Offer the following KGRAs for competitive leasing with a phase or staged leasing stipulation. These areas are within the viewshed of the Applegate-Lassen Trail, therefore industry should be made aware that exploration or development that detracts from the integrity of setting of the Applegate-Lassen Trail would be allowed only under unusual circumstances.

Soldier Meadows - All

Double Hot Springs - All

Trego - that part north of the Western Pacific Railroad Tracks Gerlach - portions of these KGRA that extend onto the Black Rock Playa

Gerlach Northeast - portions of these KGRAs that extend onto the Black Rock Playa

Fly Ranch Northeast - portions of these KGRAs that extend onto the Black Rock Playa

Rationale

Primary reason for exclusion of major portions of the resource area's KGRAs in (EA #27-020-4-019) was insufficient cultural data in areas of suspected high cultural value and the impacts of development in these areas.

Also that environmental analysis assumed that leasing would in all cases lead to development.

Historically only one out of twenty geothermal leases issued by BLM have the potential to reach the development stage.

A phased or staged leasing stipulation on a geothermal lease allows the analysis and authorization for each separate phase or stage of geothermal activity (from casual exploration through complete preparation and analysis of a proposed plan of operation).

This approach would allow leasing to begin in an environmentally sensitive area (Applegate-Lassen Trail view shed, Black Rock Playa). This area may or may not have the potential to be developed as an economic geothermal

M 5.2 (continued)

source. If the area can be developed, the analysis of a submitted plan of operation could assist the authorized officer in determining if authorization for that development should be granted, and if adverse impacts can or cannot be mitigated.

Geothermal development would enable or help the country to become energy sufficient, and would reduce our dependence upon fossil fuels.

DISTRICT MANAGER'S DECISION:

MFP | | Reject the recommendation.

<u>Rationale</u>

The geothermal program is addressed in Minerals Recommendation 5.5. None of the companies that responded to the District MFP II request for public input were in favor of phased leasing. All companies wanted to know whether or not leasing would be allowed along the trail.

MANAGEMENT	FRAMEWORK PLAN
ECOMMENDATION	-ANALYSIS-DECISION

	Name (MFP)
	Sonoma-Gerlach
	Activity
	Minerals 5.3
ı	Overlay Reference
1	Step 1 2 Step 3

Recommendation: M 5.3

MFP !

Make the following public lands available for leasing as soon as possible:

T. 23 N., R. 28 E., All public lands

T.-23 N., R. 29 E., All public lands

T. 25 N., R. 31 E., Secs. 12, 14, 22, 24, 26

T. 25 N., R. 32 E., Secs. 6, 18, 30

T. 28 N., R. 32 E., Sec. 10

T. 29 N., R. 33 E., Secs. 25, 26, 35, 36

1 T. 31 N., R. 33 E., Sec. 1

T. 29 N., R. 34 E., Secs. 31, 32, 33

T. 33 N., R. 34 E., Secs. 20, 24, 26, 28, 30, 36

T. 33 N., R. 35 E., Secs. 20, 32

T. 26 N., R. 38 E., Sec. 1

Rationale:

The Winnemcuca District Regional Oil and Gas/Geothermal Leasing EAR No. 27-020-4-103 has excluded the above described lands from leasing pending historical and archeological studies.

The lands under recommendation are classified as "Prospectively Valuable for Geothermal Resources" by the U.S. Geological Survey. Geothermal lease applications are pending in all these areas and exploration activities are occurring in several of these areas.

Leasing of these lands as soon as possible would open up the lands for development if exploration activities discovered significant geothermal resources.

Support:

The following support items are needed to accomplish the objectives and recommendations:

- 1. Complete wilderness studies to clear intensive study areas.
- Complete archeological and historical studies.
- 3. Fire suppression needs.
- 4. Cadastral survey needs.

Multiple Use Recommendation

MFP II

Make the following public lands available for geothermal leasing.

- T. 23 N., R. 28 E., All public lands
- T. 23 N., R. 29 E., All public lands
- T. 25 N., R. 31 E., Secs. 12, 14, 22, 26
- T. 25 N., R. 32 E., Secs. 6, 18, 30
- T. 28 N., R. 32 E., Sec. 10
- T. 29 N., R. 33 E., Secs. 25, 26, 35, 36
- T. 31 N., R. 33 E., Sec. 1
- T. 29 N., R. 34 E., Secs. 31, 32, 33
- T. 33 N., R. 34 E., Secs. 20, 24, 26, 28, 30, 36
- T. 33 N., R. 35 E., Secs. 20, 32
- T. 26 N., R. 38 E., Sec. 1

Leasing will require pre-lease archeological and historical clearance or shall be permitted on a phased-leasing basis.

Rationale

Environmental Analysis #27-020-4-103 can be amended to permit phased leasing on the areas identified in this recommendation.

Pre-lease clearance prior to leasing assumes that full geothermal development will following the leasing action. Historically only one in twenty geothermal leases have resulted in development phase of geothermal development. Phased leasing would allow an analysis of a certain stage in geothermal leasing to be analyzed at a magnitude equal to the proposed action.

1 FP | | |

DISTRICT MANAGER'S DECISION:

Reject the recommendation.

Rationale

This recommendation is addressed in Minerals Recommendation 5.5.

MFP I

Recommendation: M 5.4

Make no land use decisions that would interfere with or prevent oil and gas exploraiton, leasing, and/or development on public lands, or any other lands containing federally owned minerals, classified by the U.S. Geological Survey as Prospectively Valuable for Oil and Gas.

Rationale:

The classification of lands are Prospectively Valuable for Oil and Gas indicates that these areas hold a greater potential for oil an gas resources than do non-classified lands.

Interest in oil and gas in the resource area is increasing. A reported show of high gravity oil in the Ellison Well in Pumpernickel Valley (Munger Oilogram, February 1, 1980), and a marked increase in oil and gas lease applications, indicates a growing interest. The possibility exists that oil and gas may be present in the resource area.

Oil and gas production would greatly stimulate local economies. Increase demands for services, supplies, and materials during the various phases of oil and gas exploration and development would be met by local communities, and new jobs would be created as a result.

The Winnemucca District Regional Oil and Gas/Geothermal EAR No. 27-020-4-103, assessing the impacts of leasing in the Sonoma and Blue Wing Planning Units, was completed December 1975. Since the completion of that EAR several oil and gas leases have been issued, and exploration and leasing activities are on the increase.

Continued leasing will increase opportunities for finding and developing new oil and gas resources, which in turn will increase chances of national energy self-sufficientcy, a national priority.

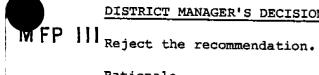
Support:

The following support items are needed to accomplish the objectives and recommendations:

- 1. Complete pre-lease archeological and historical clearances.
- 2. Complete wilderness studies to clear intensive study areas.
 - 3. Fire suppression needs.
 - Cadastral survey needs.

MFP II Recommendation not addressed in MFP II

M 5.4 (continued)



DISTRICT MANAGER'S DECISION:

Rationale

This recommendation is addressed in Minerals Recommendation 5.5.

Sonoma-Gerlach MFP III Minerals 5.5

As Currently Written:

The Sonoma-Gerlach Resource Area will be open to geothermal and oil and gas leasing with the following restrictions:

- Special stipulations for no surface occupancy will be applied to the following:
 - a. Visible remnants of the Applegate-Lassen Trail from Rye Patch Reservoir to the Western Pacific Railroad track near Trego. In this area the trail is defined as the actual trail itself.
 - b. Sage grouse strutting grounds
 - c. S-l cultural and historical sites
 - d. The George Lund Petrified Forest
 - The Soldier Meadows desert dace ACEC
 - f. Non-competitive areas and all KGRAs or portions thereof within the Black Rock Desert will be offered for lease except for those which are areas of significant environmental conflict or have historical and/or cultural significance. The following areas meet the above criteria: Double Hot Springs, Black Rock Springs, and the Applegate-Lassen Emigrant Trail. This includes that portion of the Emigrant Trail from the Sonoma-Gerlach Resource Area boundary near the Western Pacific Railroad track northerly to High Rock Canyon. This encompasses approximately 97,288 acres.

The following will be leased with special stipulations:

The west arm of the Black Rock playa

Critical wildlife habitat areas

2. No leasing will be permitted on community watersheds and the Mahogany Creek Natural Area.

Note: Legal descriptions for the community watersheds can be found in Lands Decision 2.5.

Change To:

The original decision will remain as written.

Rationale:

The Applegate-Lassen Trail, a side trail of the main California Trail designated to be an alternative to the Oregon Trail, was pioneered in 1846 for emigrant travel. The trail, which follows a series of hot and cold springs in the Black Rock region, traverses a broad variety of natural areas including the extensive desert playa and the rugged High Rock Canyon. The trail was considered a very difficult route to follow by the emigrants. Modern developments are rare in the area and traces of the trail are as well preserved as any in the far west. The trail is on the National Register of Historic Places and is being proposed as a National Historic Landmark largely due to the unchanged nature of the total landscape over the past 130 years.

In 1978 Peggy McGuckian Jones, Archeologist for the Winnemucca District, completed "A Study of the Fremont, Applegate-Lassen, and Nobles' Routes" Emigrant Trails in the Black Rock Desert. Based on her study, Mrs. Jones made the following recommendations.

In general, where twentieth century intrusions in the form of modern structures, highways, or machinery exist, the exclusion from leasing of a narrow corridor in the immediate vicinity of the trail has been considered adequate protection as the integrity of setting and feeling has already been impaired. However, where there are no such intrusions from the present and the route of the trail is clear through either actual physical remains or through comparison with emigrant journalists descriptions, a "line of sight" exclusion has been recommended.

In December 1980 a special report was completed entitled "A Critical Viewshed for the Applegate-Lassen Trail." The analysis described in this report suggests that six miles is a reasonable boundary for the "critical viewshed" in the playa area. Beyond six miles, even a major power plant could be made nonintrusive by reasonable stipulations, such as use of inconspicuous coloring, orientation of structures, etc. At distances of less than six miles potential for unavoidable visual intrusions resulting from geothermal development does exist.

The approach and conclusions outlined in this report were reviewed in the field on September 24, 1980, by Ed Evatz, Stuart Gearhart, Rich Hains, Rodger Jarrel, Roger McCormack, Bob Stewart, Brad Hines, and Regina Smith. The Nevada State Historic Preservation Officer was also represented on that trip by Charles Zeir. By the end of the day there was a general consensus, to which no one voiced objection, that the approach outlined was adequate and that the proposed critical viewshed boundaries were reasonable.

Multiple Use Recommendation

Non-competitive, geothermal leases or those leases to be issued under the geothermal simultaneous filing system in the area identified below, shall be issued with a phased or staged leasing stipulation.

These areas are within the viewshed of the Applegate-Lassen Trail, therefore industry should be made aware that exploration or development that detracts from the integrity of setting of the Aplegate-Lassen Trail would be allowed only under unusual circumstances.

- T. 33 N., R. 25 E., north of the Western Pacific Railroad
- T. 34 N., R. 24 E., east of the crest of hills on western margin of playa
- T. 34 N., R. 25 E., north of the Western Pacific Railroad
- T. 34 N., R. 26 E., north of the Western Pacific Railroad
- T. 34 N., R. 27 E., north of the Western Pacific Railroad
- T. 35 N., R. 24 E., east of the crest of the Calico Mountains
- T. 35 N., R. 25 E.; T. 35 N., R. 26 E.; T. 35 1/2 N., R. 27 E.; north of the Western Pacific Railroad
- T. 35 1/2 N., R. 25 E.; T. 35 1/2 N., R. 26 E.; T. 35 1/2 N., R. 27 E.; T. 36 N., R. 24 E.; east of the crest of the Calico Mountains
- T. 36 N., R. 25 E.; T. 36 N., R. 26 E.; west of the crest of the Black Rock Range.
- T. 37 N., R. 24 E., east of the crest of the Calico Mountains.
- T. 37 N., R. 25 E.; T. 37 N., R. 26 E.; west of the crest of the Black Rock Range.
- T. 38 N., R. 24 E., east of the crest of the Calico Mountains.
- T. 38 N., R. 25 E.; T. 38 N., R. 26 E.; west of the crest of the Black Rock Range.
- T. 39 N., R. 24 E.; T. 39 N., R. 25 E.; T. 39 N., R. 26 E.; west of the crest of the Black Rock Range.
- T. 40 N., R. 24 E.; T. 40 N., R. 25 E.

Reasons

There are a total of five issued non-competitive leases in the identified area--adjacent to Fly Ranch Northeast and Fly Ranch KGRAs.

There are five lease applications for non-competitive leases adjacent to the Trego KGRA, and within the viewshed of the Applegate-Lassen Trail.

There are 13 non-competitive leases and one geothermal simultaneous filing lease area adjacent to the Double Hot Springs KGRA.

Public Participation

The Winnemucca District Advisory Council made a recommendation concerning geothermal leasing at their September 1981 meeting. They recommended that leasing be deferred for the next two years and reviewed at that time to determine whether or not the area should remain in a deferred status. This approach would keep the Black Rock area in the suspended status it is presently in and does not provide a solution to the need for a decision to lease or not lease the trail corridor.

Congressman Santini, in a radio interview in Winnemucca on September 10, 1981, stated: "If we truly have an historical region of the State of Nevada that would be jeopardized by geothermal development—I think we have enough other healthy vital geothermal development areas in the state that we can afford to take two or three steps backward and look at the area and try to honestly understand what are the losses, what are the trade—outs if we were to allow geothermal development."

None of the companies that responded to the District MFP II request for public input were in favor of phased leasing. All companies wanted to know whether or not leasing would be allowed along the trail.

Of course, several groups, including the National Bicentennial Monument Committee and the Sierra Club, responded in favor of eliminating geothermal development on the entire Black Rock Desert.

Significant compromises have been made by everyone interested in this area. The original proposal made by the National Bicentennial Monument Committee encompassed the entire Black Rock Playa. This was felt to be excessive and was pared down to 97,288 acres which the district feels is adequate to protect the trail.

Other Values

The Black Rock playa is heavily used for recreational purposes. Off-road vehicles, rockhounding, and wind sailing are primary uses. The establishment of a line of sight corridor along the trail is compatible with these uses. Wildlife, livestock grazing, and wild horses will also be unaffected by this decision.

Historic sites within the Black Rock to High Rock section include Hardin City, Fort McGary Outpost at Soldier Meadows, and the site of the Little High Rock Indian massacre.

Protective Stipulations

If the potential adverse effect exists, the Bureau is required under 36 CFR 800 to consult with the State Historic Preservation Officer and the National Advisory Council on Historic Preservation. This is a lengthy and complicated process.

The Bureau also has the authority to attach stipulations to leases issued for oil and gas and geothermal exploration under the 1970 Coothermal Steam Act and the 1970 Mineral Leasing Act.

Persons-Organizations That Have Protested This Decision:

- 1. Toiyabe Chapter, Sierra Club, Reno, Nevada.
- 2. Committee for the Emigrant Trail National Monument, Palo Alto, California.
- 3. Robert L. Berry, Omaha, Nebraska.
- 4. Nevada Division of State Lands, Carson City, Nevada.
- 5. Nevada Division of Mineral Resources, Carson City, Nevada.
- 6. Nevada Bureau of Mines and Geology, University of Nevada-Reno, Reno, Nevada.

DISTRICT MANAGER'S DECISION

The Sonoma-Gerlach Resource Area will be open to geothermal and oil and gas leasing with the following restrictions:

- 1. Special stipulations for no surface occupancy will be applied to the following:
 - a. Visible remnants of the Applegate-Lassen Trail from Rye Patch Reservoir to the Western Pacific Railroad track near Trego. In this area the Trail is defined as the actual trail itself.
 - b. Sage grouse strutting grounds
 - c. S-1 cultural and historical sites
 - d. The George Lund Petrified Forest
 - e. The Soldier Meadows desert dace ACEC
 - f. Non-competitive areas and all KGRAs or portions thereof within the Black Rock Desert will be offered for lease except for those which are areas of significant environmental conflict or have historical and/or cultural significance. The following areas meet the above criteria: Double Hot Springs, Black Rock Springs, and the Applegate-Lassen Emigrant Trail. This includes that portion of the Emigrant Trail from the Sonoma-Gerlach Resource Area boundary near the Western Pacific Railroad track northerly to High Rock Canyon as legally described below. This encompasses approximately 97,288 acres.

The following will be leased with special stipulations:

The west arm of the Black Rock playa

Critical wildlife habitat areas

 No leasing will be permitted on community watersheds and the Mahogany Creek Natural Area.

Note: Legal descriptions for the community watersheds can be found in Lands Decision 2.5.

T. 35 N., R. 27 E. Sec. 2 SW1/4 Sec. 3 All Sec. 4 All Sec. 5 All Sec. 6 NE1/4 Sec. 8 NE1/4 Sec. 9 All Sec. 10 All Sec. 11 All Sec. 12 SW1/4 Sec. 13 All Sec. 14 All Sec. 15 All Sec. 16 NE1/4 Sec. 22 NE1/4 Sec. 23 All Sec. 24 All Sec. 25 All Sec. 26 NE1/4 Sec. 36 NE1/4

T. 35 1/2 N., R. 27 E.

Sec. 28 SW1/4

Sec. 29 All

Sec. 30 All

Sec. 31 All

Sec. 32 All

Sec. 33 All

Sec. 34 All

T. 35 N., R. 28 E.

Sec. 19 All

Sec. 20 SW1/4

Sec. 28 SW1/4

Sec. 29 All

Sec. 30 All

Sec. 31 All

Sec. 32 All

Sec. 33 All

T. 37 N., R. 25 E.

Sec. 1 Lots 1 and 2, S1/2 NE1/4, SE1/4

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T. 36 N., R. 27 E.

Sec. 7 All

Sec. 8 NW1/4

T. 35 1/2 N., R. 26 E.

Sec. 25 E1/2

Sec. 36 NE1/4

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T. 36 N., R. 26 E.
         Lots 4, 5, 6, 11, 12, 13, and 14, S1/2
 Sec. 1
 Sec. 2
        All
 Sec. 3
         All
         Lots 1, 2, and 3, S1/2N1/2, S1/2
 Sec. 4
 Sec. 5
         Lot 2, S1/2NE12/4, SE1/4
 Sec. 8
         NE 1/4
 Sec. 9
         Al1
 Sec. 10 All
 Sec. 12 All
 Sec. 14 All
 Sec. 15 All
 Sec. 16 Lots 1, 2, 3, 4, 5, 6, 11, 12, 13, and 14, SW1/4, E1/2SE1/4
 Sec. 21 S1/2NE1/4, SE1/4
 Sec. 22 All
 Sec. 23 All
 Sec. 24 SW1/4
 Sec. 25 W1/2
 Sec. 26 All
 Sec. 27 All
 Sec. 28 E1/2
 Sec. 33 E1/2E1/2
Sec. 34 All
Sec. 35 W1/2, SE1/4
Sec. 36 SW1/4
T. 37 N., R. 26 E.
Sec. 1
        W1/2
Sec. 2 All
Sec. 3 All
Sec. 4 Lots 1, 2, 3, and 4, S1/2N1/2, NW1/4SW1/4, S1/2SW1/4, SE1/4
Sec. 5 All
Sec. 6 All
Sec. 7 N1/2, SE1/4
                                                                   . .
Sec. 8 All
Sec. 9 All
Sec. 10 N1/2, NW1/4SW1/4, S1/2SW1/4, SE1/4
Sec. 11 All
Sec. 12 All
Sec. 13 All
Sec. 14 All
                    Get &
Sec. 15 All
Sec. 16 All
Sec. 17 All
Sec. 18 NE1/4
Sec. 10 All
Sec. 21 All
Sec. 22 All
Sec. 23 All
Sec. 24 All
Sec. 25 All
Sec. 26 All
Sec. 27 All
Sec. 28 All
Sec. 29 All
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M 5.5 T. 37 N., R. 26 E. (continued) Sec. 32 N1/2, SW1/4, N1/2SE1/4, SW1/4SE1/4 Sec. 33 All Sec. 34 All Sec. 35 All Sec. 36 All T. 37 N., R. 27 E. Sec. 7 SW1/4 Sec. 18 W1/2 Sec. 19 W1/2 Sec. 30 NW1/4 T. 38 N., R. 25 E. Sec. 1 All Sec. 2 All Sec. 3 All Sec. 4 N1/2, SE1/4 Sec. 9 NE1/4 Sec. 10 All Sec. 11 All Sec. 12 All Sec. 13 All Sec. 14 All Sec. 15 N1/2, SE1/4 Sec. 22 NE1/4 Sec. 23 All Sec. 24 All Sec. 25 All Sec. 26 N1/2, SE1/4 Sec. 36 All T. 38 N., R. 26 E. Sec. 4 W1/2 **Al**1 All A11

Sec. 5 All Sec. 6 Sec. 7 Sec. 8 Sec. 9 W1/2 Sec. 16 W1/2 Sec. 17 All Sec. 18 All Sec. 19 All Sec. 20 All Sec. 21 W1/2SE1/4 Sec. 26 SE1/4 Sec. 27 W1/2 Sec. 28 All Sec. 29 All Sec. 30 All Sec. 31 All Sec. 32 All Sec. 33 All Sec. 34 All Sec. 35 N1/2, SW1/4

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T. 39 N., R. 24 E.
 SEc. 1 Lots 1 and 2
Sec. 2 Lots 1, 2, 3, and 4
Sec. 3 Lots 1, 2, 3, and 4, S1/2NW1/4
Sec. 4 Lots 1, 2, 3, and 4, S1/2N1/2, SW1/4
Sec. 5 All
Sec. 6 All
Sec. 7 Lots 1, 2, 3, 4, 5, and 6, NE1/4, E1/2NW1/4
Sec. 8 Lots 1, 2, and 3, NE1/4, N1/2SE1/4, SE1/4SE1/4
Sec. 17 Lots 1, 2, 3, and 4, E1/2E1/2
Sec. 18 Lots 1, 2, 3, 4, 5, 6, and 7, W1/2NE1/4, E1/2NW1/4, NE1/4SW1/4,
        W12/2SE1/4
Sec. 19 Lots 3 and 4, E1/2NE1/4, E1/2NW1/4, NE1/4SE1/4, S1/2SE1/4
Sec. 20 Lots 1, 2, and 3, NE1/4NE1/4, S1/2NE1/4, S1/2NW1/4, S1/2
Sec. 29 All
Sec. 30 Lots 1, 2, 3, and 4, E1/2
Sec. 31 Lots 1, 2, 3, and 4, E1/2, E1/2SW1/4
Sec. 32 All
Sec. 33 W1/2
T. 39 N., R. 25 E.
Sec. 2
        SW1/4
Sec. 3 All
Sec. 4 All
Sec. 5 Lots 1, 2, and 3, S1/2N1/2, S1/2
Sec. 6 All
Sec. 7 NE1/4
Sec. 8 All
Sec. 9 All
Sec. 10 All
Sec. 11 All
Sec. 12 SW1/4 (NW1/4SW1/4 - water rights withdrawn)
Sec. 13 All
Sec. 14 All
Sec. 15 All
Sec. 16 All
Sec. 17 NE1/4, N1/2NW1/4, SE1/4NW1/4, S1/2
Sec. 20 All
Sec. 21 All
Sec. 22 All
Sec. 23 All
Sec. 24 All
Sec. 24 All
Sec. 25 All
Sec. 26 All
Sec. 27 All
Sec. 28 All
Sec. 29 N1/2, SE1/4
Sec. 32 NE1/4
Sec. 33 All
Sec. 34 All
Sec. 35 All
Sec. 36 All
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T. 39 N., R. 26 E.

Sec. 18 Lots 3 and 4, E1/2SW1/4

Sec. 19 Lots 1, 2, 3, and 4, E1/2W1/2, SE1/4

Sec. 20 \$1/2\$1/2

Sec. 29 N1/2, SW1/4

Sec. 30 All

Sec. 31 All

Sec. 32 All

Sec. 33 SW1/4

T. 40 N., R. 24 E.

Sec. 26 SW1/4, W1/2SE1/4, SE1/4SE1/4

Sec. 27 Lots 3 and 4, SW1/4, W1/2SE1/4

Sec. 28 SE1/4

Sec. 32 Lots 3 and 4, NE1/4, N1/2SE1/4

Sec. 33 All

Sec. 34 All

Sec. 35 Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11

Sec. 36 SE1/4SE1/4

T. 40 N., R. 25 E.

Sec. 31 S1/2SE1/4

Sec. 32 E1/2SE1/4

Rationale

The Applegate-Lassen Trail, a side trail of the main California Trail designed to be an alternative to the Oregon Trail, was pioneered in 1846 for emigrant travel. The trail, which follows a series of hot and cold springs in the Black Rock region, traverses a broad variety of natural areas including the extensive desert playa and the rugged High Rock Canyon. The trail was considered a very difficult route to follow by the emigrants. Modern developments are rare in the area and traces of the trail are as well preserve as any in the far west. The trail is on the National Register of Historic Places and is being proposed as a National Historic Landmark largely due to the unchanged nature of the total landscape over the past 130 years.

In 1978 Peggy McGuckian Jones, Archeologist for the Winnemucca District, completed "A Study of the Freemont, Applegate-Lassen, and Nobles' Routes" Emigrant Trails in the Black Rock Desert. Based on her study, Mrs. Jones made the following recommendations.

In general, where twentieth century intrusions in the form of modern structures, highways, or machinery exist, the exclusion from leasing of a narrow corridor in the immediate vicinity of the trail has been considered adequate protection as the integrity of setting and feeling has already been impaired. However, where there are no such intrusions from the present and the route of the trail is clear through either actual physical remains or through comparison with emigrant journalists descriptions, a "line of sight" exclusion has been recommended.

In December 1980 a special report was completed entitled "A Critical Viewshed for the Applegate-Lassen Trail." The analysis described in this report suggests that six miles is a reasonable boundary for the "critical viewshed" in the playa area. Beyond six miles, even a major power plant could be made nonintrusive by reasonable stipulations, such as use of inconspicuous coloring, orientation of structures, etc. At distances of less than six miles potential for unavoidable visual intrusions resulting from geothermal development does exist.

The approach and conclusions outlined in this report were reviewed in the field on September 24, 1980, by Ed Evatz, Stuart Gearhart, Rich Hains, Rodger Jarrel, Roger McCormack, Bob Stewart, Brad Hines, and Regina Smith. The Nevada State Historic Preservation Officer was also represented on that trip by Charles Zeir. By the end of the day there was a general consensus, to which no one voiced objection, that the approach outlined was adequate and that the proposed critical viewshed boundaries were reasonable.

Public Participation

The Winnemucca District Advisory Council made a recommendation concerning geothermal leasing at their September meeting (copy attached). They recommended that leasing be deferred for the next two years and reviewed at that time to determine whether or not the area should remain in a deferred status. This approach would keep the Black Rock area in the suspended status it is presently in and does not provide a solution to the need for a decision to lease or not lease the trail corridor.

M 5.5 (continued)

Primary reason for exclusion of leasing non-competitive leases in this area in (EA #27-020-4-019) was insufficient cultural data in areas of suspected high cultural value and the impacts of development in these areas.

Also that environmental analysis assumed that leasing would in all cases lead to development.

Historically, only one out of 20 geothermal leases issued by BLM have the potential to reach the development stage.

A phased or staged leasing stipulation on a geothermal lease allows the analysis and authorization for each separate phase or stage of geothermal activity (from casual exploration through complete preparation and analysis of a proposed plan of operation).

This approach would allow leasing to begin in an environmentally sensitive area (Applegate-Lassen Trail viewshed, Black Rock playa). This are may or may not have the potential to be developed as an economic geothermal source. If the area can be developed, the analysis of a submitted plan of operation could assist the authorized officer in determining if authorization for that development should be granted, and if adverse impacts can or cannot be mitigated.

Geothermal development would enable or help the country to become energy sufficient, and would reduce our dependence upon fossil fuels.

M 5.5 (continued)

Congressman Santini, in a radio interview in Winnemucca on September 10, 1981 (copy attached), statd: "If we truly have an historical region of the State of Nevada that would be jeopardized by geothermal development—I think we have enough other healthy vital geothermal development areas in the state that we can afford to take two or three steps backward and look at the area and try to honestly understand what are the losses, what are the trade—outs if we were to allow geothermal development."

None of the companies that responded to the District MFP II request for public input were in favor of phased leasing. All companies wanted to know whether or not leasing would be allowed along the trail.

Of course, several groups, including the National Bicentennial Monument Committee and the Sierra Club, responded in favor of eliminating geothermal development on the entire Black Rock Desert.

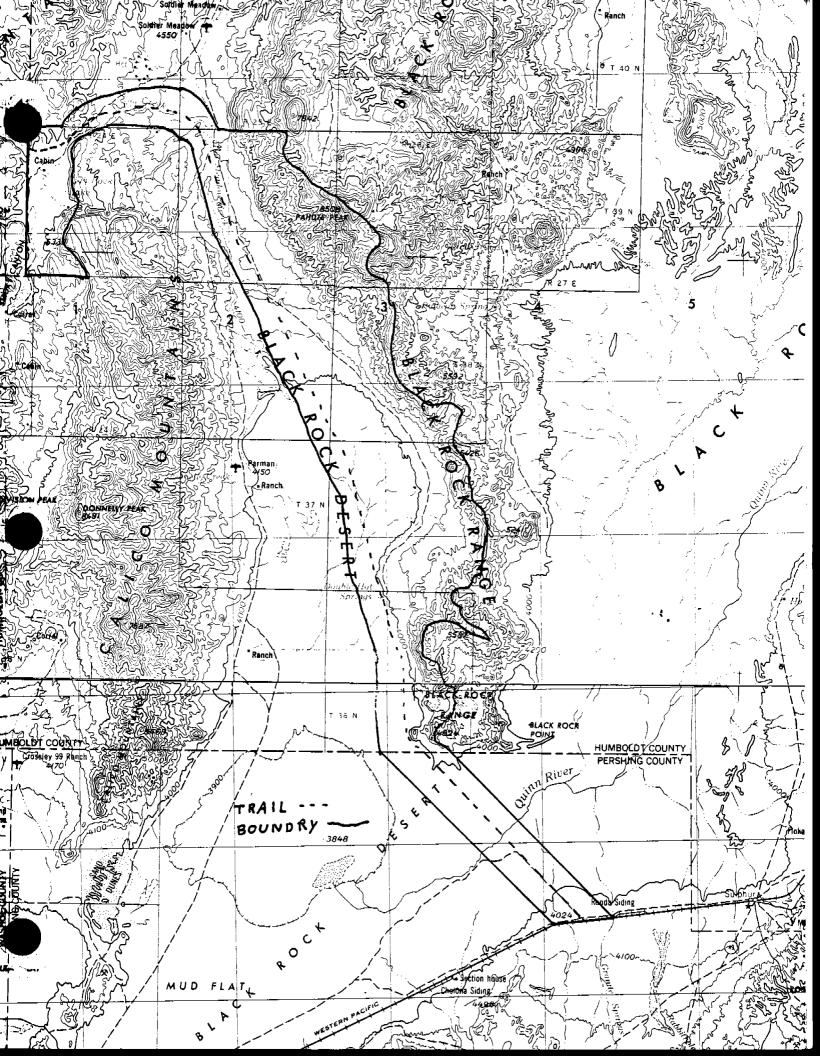
Other Values

The Black Rock playa is heavily used for recreational purposes. Off-road vehicles, rockhounding, and wind sailing are primary uses. The establishment of a line of sight corridor along the trail is compatible with these uses. Wildlife, livestock grazing, and wild horses will also be unaffected by this decision.

Historic sites within the Black Rock to High Rock section include Hardin City, Fort McGary Outpost at Soldier Meadows, and the site of the Little High Rock Indian massacre.

Protective Stipulations

If the potential adverse effect exists, the Bureau is required under 36 CFR 800 to consult with the State Historic Preservation Officer and the National Advisory Council on Historic preservation. This is a lengthy and complicated process.



Name (MFP)	
Sonoma-Gerlach	
Activity	
Minerals	
Objective Number	
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MANAGEMENT FRAMEWORK PLAN - STEP 1 ACTIVITY OBJECTIVES

Objective: M-6

Provide sodium and potassium to meet market demands.

Rationale:

Sodium is a valuable mineral used for producing paper and allied products, snow and ice control on roads and highways, and for air pollution control in coal-fire electric generation plan precipitator stacks. Potassium is important for the production of fertilizer.

MFP :

Recommendation: M 6.1

Make no land use decisions that would interfere with the leasing and development of lands classified by the U.S. Geological Survey as being prospectively valuable for sodium and potassium.

Rationale:

The classification of lands as prospectively valuable for sodium and potassium indicates that these areas may hold greater potential for production of sodium and potassium than unclassified areas. Sodium carbonate is an important raw material for precipitator stacks in coal-fired generation electric plants. The demand for sodium is, therefore, expected to increase as more of the domestic demand for electricity is met by the creation of new coal-fired electric generation plants. Potassium is important in the manufacture of chemical fertilizer, a commodity in much demand by the domestic agricultural industry. The Interior Department has listed potassium as being of "Compelling National Significance." Most likely, the demand for chemical fertilizers will continue to grow as the world's demand for food continues to grow. Support will be needed from the cadastral and legal divisions within the Nevada State Office and from the appropriate offices of the U.S. Geological Survey. Prelease archeological clearance support will be needed from district office personnel.

Support:

Cadastral and legal divisions within the Nevada State Office and from the appropriate offices of the U.S. Geological Survey. Prelease clearance support will be needed from district office personnel.

FP 11

Multiple Use Recommendation

Reject the recommendation.

Reasons

The sodium an potassium leasing program can be adequately handled through normal procedures.

At this time, there is not sufficient interest or applications for sodium and potassium leasing that would necessitate the restriction to other resource values asked for in this recommendation.

FP | DISTRICT MANAGER'S DECISION:

Allow leasing of Winnemucca Lake, Carson Sink, San Emidio Desert, and Smoke Creek Desert for sodium and potassium as the demand arises. Do not allow leasing on the playa of the Black Rock Desert.

M 6.1 (continued)

<u>Rationale</u>

Sodium and potassium demand may increase in the near future. The development of Winnemucca Lake, Carson Sink, San Emidio, and Smoke Creek Deserts is compatible with existing and projected future uses of these areas.